

CLAIMS

1. A cooling device (10) for a retarder (48) of a vehicle engine (40), comprising a coolant circuit (12) with a coolant cooler (14) and a retarder cooler (20);
5 at least one further coolant circuit (22) with a further coolant cooler (24) and a further cooler (30);
characterised by valve means (32) arranged to connect the coolant circuits (12, 22) together upon activation of the retarder (48) so that at least two coolant coolers (14, 24) are then used for cooling the retarder (48), and to disconnect the coolant
10 circuits (12, 22) from one another so that they revert to being separate coolant circuits upon deactivation of the retarder (48).
2. A cooling device according to claim 1, characterised by further valve means (34) arranged to disconnect the further cooler (30) from the further coolant
15 circuit (22) upon activation of the retarder (48) and to connect the further cooler (30) to the further coolant circuit (22) upon deactivation of the retarder (48).
3. A cooling device according to any one of the foregoing claims, characterised in that said valve means comprises a first directional valves (32, 34).
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4. A cooling device according to any one of the foregoing claims, characterised in that the first coolant circuit (12) also comprises an engine radiator (42).
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5. A cooling device according to claim 4, characterised in that said further cooler (30) takes the form of one or more out of a number of coolers comprising a charge air cooler, an EGR cooler and a motor oil cooler.
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6. A method of cooling a retarder (48) of a vehicle engine (40) by means of a cooling device (10) comprising a first coolant circuit (12) with a coolant cooler (14)

and a retarder cooler 20 and at least one further coolant circuit (22) with a further coolant cooler (24) and a further cooler (30), characterised by the coolant circuits (12, 22) being connected together upon activation of the retarder (48) so that at least two coolant coolers (14, 24) are then used for cooling the retarder (48); and by
5 disconnection of the mutually connected coolant circuits (12, 22) from one another so that they revert to being separate circuits upon deactivation of the retarder (48).

7. A method according to claim 6, characterised by disconnection of the further cooler (30) from the further coolant circuit (22) upon activation of the retarder
10 (48); and by connection of the further cooler (30) to the further coolant circuit (22) upon deactivation of the retarder (48).